

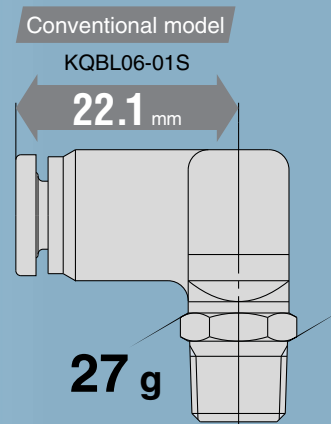
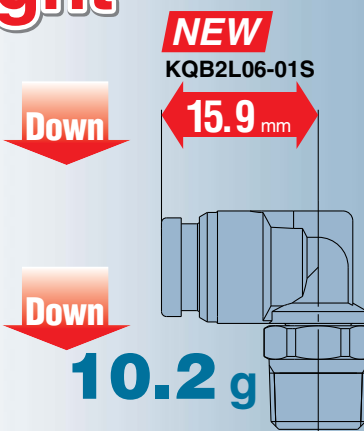
Metal One-touch Fittings

Compact and Light

New

RoHS

Dimensions **Approx. 30%**
* Comparison with KQBL06-01S



Weight **Approx. 62%**
* Comparison with KQBL06-01S

Down

10.2 g

- More configuration variations
17 models ◀ **9** models

Fluid temperature **-5 to 150°C**

Connection thread M, R, Rc, UNF, NPT, G

Applicable tube material FEP • PFA • Nylon • Soft nylon
Polyurethane • Polyolefin

○ Electroless nickel plated
(Brass parts)

○ Grease-free

Variations

● Added size

		Applicable tube O.D. (mm)						
		ø3.2	ø4	ø6	ø8	ø10	ø12	ø16
Connection thread	M5	●	●	●	●	●	●	●
	R1/8	●	●	●	●	●	●	●
	G1/8	●	●	●	●	●	●	●
	R1/4	●	●	●	●	●	●	●
	G1/4	●	●	●	●	●	●	●
	R3/8	●	●	●	●	●	●	●
	G3/8	●	●	●	●	●	●	●
	R1/2	●	●	●	●	●	●	●
	G1/2	●	●	●	●	●	●	●
	No thread	●	●	●	●	●	●	●

		Applicable tube O.D. (inch)					
		ø1/8"	ø5/32"	ø1/4"	ø5/16"	ø3/8"	ø1/2"
Connection thread	10-32 UNF	●	●	●	●	●	●
	NPT1/8	●	●	●	●	●	●
	NPT1/4	●	●	●	●	●	●
	NPT3/8	●	●	●	●	●	●
	NPT1/2	●	●	●	●	●	●
	No thread	●	●	●	●	●	●



Series **KQB2**

SMC

CAT.ES50-34A

Metal One-touch Fittings

Applicable Tube: Metric Size, Connection Thread: M, R, Rc

Series *KQB2*

RoHS



Applicable Tube

Tube material	FEP, PFA, Nylon, Soft nylon ^{Note 1)} , Polyurethane, Polyolefin
Tube O.D.	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16

Specifications

Fluid	Air, Water
Operating pressure range ^{Note 2)}	−100 kPa to 1 MPa ^{Note 3)}
Proof pressure	3.0 MPa
Ambient and fluid temperature ^{Note 4)}	−5 to 150°C (No freezing) ^{Note 3)}
Lubricant	Grease-free specification
Seal on the threads	With sealant

Note 1) For soft nylon tube, water cannot be used.

Note 2) Avoid using in a vacuum holding application such as a leak tester, since there is leakage.

Note 3) Check the operating pressure range and operating temperature range of the tube.

Note 4) It is recommended that you use the inner sleeve in the following conditions (Except ø3.2):

- When using in an environment where the fluid temperature changes drastically.
- When using at a high temperature.

* Temperature Condition of Mounting the Inner Sleeve

Tube	Temperature
FEP tube/TH series	80°C or more
PFA tube/TL series	120°C or more

Spare Parts

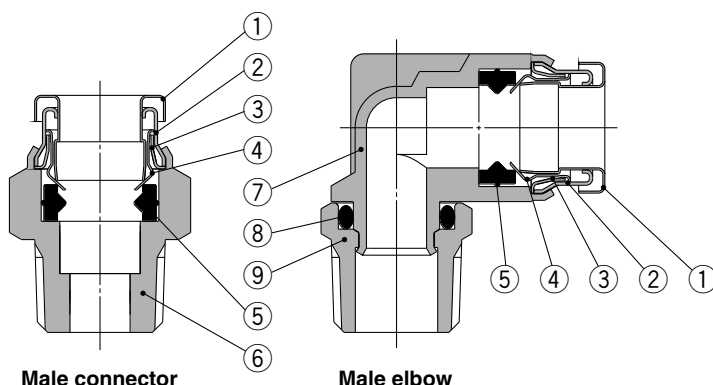
Description	Tube O.D.	Part no.	Material
Gasket	—	M-5G3	Stainless steel 316, Special FKM
Bulkhead nut	ø3.2 ø4	KQB223-P01	C3604 (Electroless nickel plated)
	ø6	KQB206-P01	
	ø8	KQB208-P01	
	ø10	KQB210-P01	
	ø12	KQB212-P01	
	ø16	KQB216-P01	

Cross Reference Table of the Inner Sleeve

Tube O.D.	Tube material			Applicable inner sleeve	
	TUS (Soft polyurethane)	TH/THI (FEP)	TL/TIL (PFA)	Part no.	Length
ø4	—	TH0402	—	TJ-0402	18
	TUS0425	TH0425	—	TJ-0425	18
	—	—	TL0403	TJ-0403	18
ø6	TUS0604	TH0604	TL0604	TJ-0604	19
	TUS0805	—	—	TJ-0805	20.5
	—	TH0806	TL0806	TJ-0806	20.5
ø10	TUS1065	—	—	TJ-1065	23
	—	TH1075	—	TJ-1075	23
	—	TH1008	TL1008	TJ-1008	23
	TUS1208	—	—	TJ-1208	24
ø12	—	TH1209	—	TJ-1209	24
	—	TH1210	TL1210	TJ-1210	24

* C2700 + Electroless nickel plated is used for the TJ series.

Construction



Component Parts

No.	Description	Material
1	Release button	Stainless steel 304
2	Guide 1	Stainless steel 304
3	Guide 2	Stainless steel 304
4	Chuck	Stainless steel 304
5	Seal	Special FKM (Fluoro coated)
6	Male connector body	C3604 (Electroless nickel plated)
7	Male elbow body	Stainless steel 316
8	O-ring	Special FKM (Fluoro coated)
9	Stud	C3604 (Electroless nickel plated)

Series KQB2

Applicable Tube: Metric Size, Connection Thread: G

Dimensions

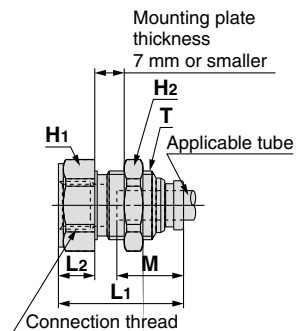
Bulkhead Connector: KQB2E



Applicable tube O.D. (mm)	Connection thread G	Model	T (M)	Width across flat		L1	L2	Mounting hole	M	Effective area (mm ²)	Weight (g)
				H1	H2						
ø4	1/8	KQB2E04-G01	M10 x 1	17	12	27.1	11	11	12.6	5.6	25.1
	1/4	KQB2E04-G02		19	12	32.7	16.6				36.9
ø6	1/8	KQB2E06-G01	M14 x 1	17	17	25.5	7.4	15	13.6	13.1	26.8
	1/4	KQB2E06-G02		19	17	33.5	15.4				42.7
	3/8	KQB2E06-G03		24	17	35	16.9				62
ø8	1/8	KQB2E08-G01	M15 x 1	17	19	27.6	8.2	16	16.1	26.1	30.4
	1/4	KQB2E08-G02		19	19	34.5	15.1				43.9
	3/8	KQB2E08-G03		24	19	36	16.6				66.2
ø10	1/4	KQB2E10-G02	M18 x 1	19	21	33.5	13.5	19	17	41.5	46.8
	3/8	KQB2E10-G03		24	21	35.6	15.6				65.4
ø12	3/8	KQB2E12-G03	M20 x 1	24	24	35.9	14.7	21	18.6	58.3	119.2
	1/2	KQB2E12-G04		27	24	42.2	21				91.9
ø16	3/8	KQB2E16-G03	M27 x 1	29	30	37.2	13.1	28	20.8	96	118.2
	1/2	KQB2E16-G04		29	30	43.1	19			113	128.7

Note) Value of FEP tube.

Value of nylon tube for ø16 only.



Extended Male Union: KQB2W

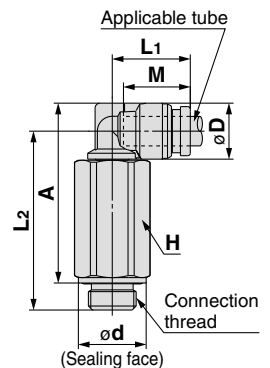


Applicable tube O.D. (mm)	Connection thread G	Model	H (Width across flat)	Note 1) øD	ød	L1	L2	A	M	Effective area (mm ²)	Weight (g)
ø4	1/8	KQB2W04-G01	14	9.1	13.8	14.4	35.3	34.3	12.6	4	34.5
	1/4	KQB2W04-G02	19		17.8	14.4	38.7	36.7			70.6
ø6	1/8	KQB2W06-G01	14	11.4	13.8	15.9	36.4	36.6	13.6	10.9	36.1
	1/4	KQB2W06-G02	19		17.8	15.9	39.8	39			72.2
	3/8	KQB2W06-G03	22		21.8	15.9	42.3	40.5			106.7
ø8	1/8	KQB2W08-G01	14	13.7	13.8	18.6	40	41.3	16.1	20.5	41.3
	1/4	KQB2W08-G02	19		17.8	19.1	43.4	43.7			76.7
	3/8	KQB2W08-G03	22		21.8	19.1	45.9	45.2			112.9
ø10	1/4	KQB2W10-G02	19	16.6	17.8	21	49.8	51.6	17	33.5	84.8
	3/8	KQB2W10-G03	22		21.8	21	50.2	51			116.6
	1/2	KQB2W10-G04	27		26.5	21	54.2	53.5			196.6
ø12	1/4	KQB2W12-G02	19	18.7	17.8	22.6	50.9	53.7	18.6	47.7	88.7
	3/8	KQB2W12-G03	22		21.8	23.6	53.3	55.1			111.6
	1/2	KQB2W12-G04	27		26.5	23.6	57.3	57.6			193.8
ø16	3/8	KQB2W16-G03	22	24.6	21.8	26.3	62	66.1	20.8	71	133.6
	1/2	KQB2W16-G04	27		26.5	27.3	66	68.6		100	201.6

Note 1) øD is maximum diameter.

Note 2) Value of FEP tube.

Value of nylon tube for ø16 only.



Female Connector: KQB2F



Applicable tube O.D. (mm)	Connection thread G	Model	H (Width across flat)	Note 1) øD	L1	L2	M	Effective area (mm ²)	Weight (g)
ø4	1/8	KQB2F04-G01	17	8.7	25	9.5	12.6	5.6	21
	1/4	KQB2F04-G02	19		30.6	14.5			32
ø6	1/8	KQB2F06-G01	17	11.1	25.5	9.7	13.6	13.1	22.6
	1/4	KQB2F06-G02	19		31.1	14.7			33
	3/8	KQB2F06-G03	24		32.6	14.6			51.1
ø8	1/8	KQB2F08-G01	17	13.4	27.6	10	16.1	26.1	25.1
	1/4	KQB2F08-G02	19		33.2	14.9			36.3
	3/8	KQB2F08-G03	24		34.6	14.7			53.8
ø10	1/4	KQB2F10-G02	19	16.4	33.5	15.2	17	41.5	39.9
	3/8	KQB2F10-G03	24		34.9	15			57.7
	1/2	KQB2F10-G04	27		34.5	15.2			41.8
ø12	3/8	KQB2F12-G03	24	18.5	35.9	15	18.6	58.3	59.7
	1/2	KQB2F12-G04	27		41.8	19.9			81.6
	3/8	KQB2F16-G03	24	24.6	37.2	15.4	20.8	81	66.6
	1/2	KQB2F16-G04	27		43.1	20.4		113	89.1

Note 1) øD is maximum diameter.

Note 2) Value of FEP tube.

Value of nylon tube for ø16 only.

